

## Section 1-2: What Is a Function?

**Warm-up:** To determine the retail price  $a$  of the androids that Matt Mitarnowski sells, he multiplies the wholesale price  $p$  by 1.75. Write an equation showing the situation and make a table showing 6 values.

*Dependent Variable:*

*Independent Variable:*

*Question:* Why do we call them the dependent and independent variables?

*Function:*

*“Is a function of”:*

*Example 1:* The table below shows the average temperature  $T$  in Fahrenheit for each month  $M$  in Annville, PA.

$M$	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$T$	35	39	49	61	71	79	83	81	73	63	51	40

Source: <http://www.weather.com/outlook/travel/vacationplanner/vacationclimatology/monthly/USPA0042>

a. Is  $T$  a function of  $M$ ? Why or why not?

b. Is  $M$  a function of  $T$ ? Why or why not?

*Domain:*

*Range:*

*Input:*

*Output:*

*Example 2:* Give the domain and range of example 1.

Some common sets:

- Natural Numbers:
- Integers:
- Whole Numbers:
- Rational Numbers:
- Real Numbers:

*Homework:*